

Benjamin J. Cayetano,
Governor

Hawaii Flood Management News

Department of Land and Natural Resources
Land Division, Engineering Branch

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We welcome newsworthy items from the general public. Articles may be sent to the Engineering Branch, Land Division, DLNR, P. O. Box 373, Honolulu, Hawaii 96809. Call (808) 587-0248 for more information.

If you'd like to receive this newsletter via email, please send your email address to Carol_L_Tyau@exec.state.hi.us or if you wish to be removed from the mailing list please contact Elaine Keb at 587-0227.

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Compliance with Floodway Regulations

Compliance with Floodway Regulations start at the planning stages of any new or substantially improved structure. It is the responsibility of the property owner, developer, or contractors to determine if the project site is within a Special Flood Hazard Area (SFHA) and obtain all applicable permits before proceeding with any construction or development within an identified floodplain.

Title 44 of the Code of Federal Regulations prohibits encroachment, including new fill, new construction, substantial improvements, and other development within an adopted regulatory floodway unless it can be demonstrated that the new development will not cause a rise in the regulatory base flood elevations (BFEs). A floodplain is divided into two flood hazard zones: a floodway and flood fringe (see Figure 1). The "floodway" is delineated for the purpose of keeping an area clear of obstructions to allow flood waters to freely discharge the 100-year flood without cumulatively increasing the water surface elevation more than one foot. The area of the floodplain outside the floodway is called the flood fringe. Under the National Flood Insurance Program's (NFIP) minimum rules and regulations, encroachment is permissible. Although the NFIP may allow encroachment within the floodway fringe, local County ordinances may have more restrictive requirements. For instance, Hawaii County Code Section 27-18 (c) (2) states:

"Within all zones of special flood hazards, but not including floodways, filling which would result in the blockage or impediment of flow and/or induce or aggravate flooding shall be prohibited unless certified by a professional civil engineer registered in the State of Hawaii, with supporting data, that the encroachment will not cause any increase in base flood elevations during the occurrence of the base flood discharge."

"Compliance with Floodway Regulations" - continued on page 4

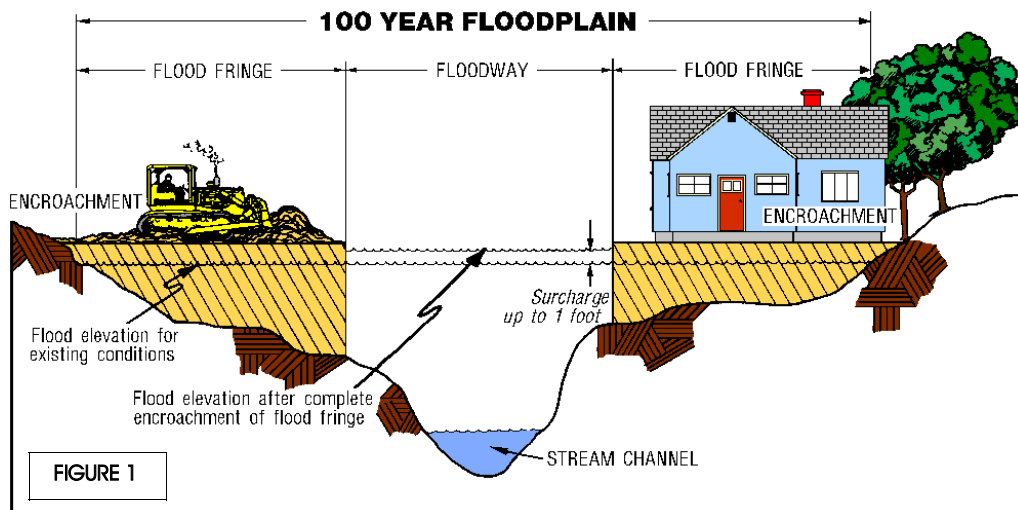


FIGURE 1

Flood Insurance Rate Maps



Did you realize that printed Flood Insurance Rate Maps in your office may not be the most current flood hazard information? In fact, some maps may have been updated with a Letter of Map Revision that has not yet been incorporated onto the FIRM panels. To ensure that you are using the most current information, contact your local NFIP Coordinator:

City and County of Honolulu

Department of Planning and Permitting

- Mr. Robert Sumitomo
(808) 523-4254
- Mr. Mario Siu Li
(808) 523-4247

County of Hawaii

Department of Public Works

- Mr. Kelly Gomes
(808) 961-8327 (Hilo)
- Mr. Kiran Emler
(808) 327-3530 (Kona)

County of Maui

Department of Planning

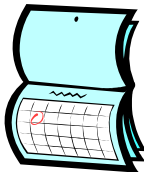
- Mr. Francis Cerizo
(808) 270-7771

County of Kauai

Department of Public Works

- Mr. Wallace Kudo
(808) 241-6620

Upcoming Events



May 19-22, 2002

FEMA's 2002 National Flood Conference, New Orleans, LA.

June 23-28, 2002

Association of State Floodplain Managers 26th Annual Conference, Phoenix, AZ.

September 8-11, 2002

Association of Dam Safety Officials Annual Dam Safety Conference, Tampa, FL.

Top 10 Facts Every Lender needs to know about the National Flood Insurance Program (NFIP)

The top ten facts listed below apply to Federally regulated lending institutions that are supervised by the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of Thrift Supervision, Farm Credit Administration, and National Credit Union Administration, as well as Government Sponsored Enterprises Freddie Mac and Fannie Mae.

1. **Flood insurance is mandatory for buildings in FEMA-identified high-risk flood areas, which are called Special Flood Hazard Areas (SFHAs).** This requirement applies to structures located in SFHAs on FEMA's flood maps including loans for manufactured (mobile) homes, and commercial buildings. Whenever you make, increase, extend, or renew a mortgage, home equity, home improvement, commercial or farm credit loan in a SFHA, you must require flood insurance. You may require flood insurance on all loans, even those outside SFHAs.
2. **Ensure that flood insurance coverage is maintained for the term of the loan.** Escrowing flood insurance premiums can help make sure you meet this requirement, and it helps protect you and your borrowers from uninsured flood losses.
3. **Flood zone determinations are required to establish whether a structure is located in a SFHA.** Document your findings on the required Standard Flood Hazard Determination Form (SFHDF). The SFHDF is available online @ <http://www.fema.gov/nfip/forms.htm>.
4. **Know the amount of flood insurance coverage to require.** The coverage required by law is the lesser of the following: The maximum amount of NFIP flood insurance coverage available, the outstanding principal balance of the loan, or the value of the property minus the land.
5. **Notify borrowers in writing of the requirement to buy flood insurance for new and existing loans.**

New Loans: If you determine that a home or business is in a SFHA before loan closing, you are required to notify the borrower within a reasonable time (defined by Federal regulation as at least 10 days) prior to the loan closing.

Existing Loans: If you determine that an existing loan for a home or business is in a special flood hazard area, you are also required to notify the borrower within a reasonable time. The law provides for force placement of flood insurance 45 days after the borrower is notified of deficient flood insurance coverage. The National Flood Insurance Program's Mortgage Portfolio Protection Program helps you force place flood insurance when necessary. For more information about the Mortgage Portfolio Protection Program, call the FEMA Fax at (202) 646-FEMA and request document 23105.

6. **Escrow flood insurance premiums.** The law requires you to escrow flood insurance premiums for homes in SFHAs when taxes, other forms of insurance, or any other payments are escrowed. To help maintain flood coverage for you and your borrower, consider escrowing flood insurance premiums for all loans, including loans on non-residential improved real estate.

7. **There is no waiting period for flood insurance to go into effect when it is purchased in connection with the making, increasing, renewing, or extending a loan.** In most other instances, there is a 30-day waiting period before flood insurance goes into effect. For more information about the waiting period and its exceptions, call the FEMA Fax at (202) 646-FEMA and request document 23106 for a copy of Policy Issuance 8-95.
8. **Notify the insurance company or agent when the lender or servicer of a loan changes.** Notification of a change of lender or servicer must be made to the insurance company or agent who wrote the flood insurance policy within 60 days after the effective date of the change. An instruction sheet about this requirement is available on the FEMA Fax by calling (202) 646-FEMA and requesting document 23108.
9. **For more details, read "The Mandatory Purchase of Flood Insurance Guidelines".** For a copy, call 1-800-480-2520, and request document F-083 or online at <http://www.fema.gov/nfip/mpurfi.htm>
10. **Flood insurance and the mandatory purchase laws help protect your investments as well as your borrowers' against uninsured flood losses.** Floods happen all over the country. Make sure you and your borrowers are protected from uninsured flood losses for their homes, businesses, and belongings by following these requirements. It's just good business.



Source: Federal Emergency Management Agency

Workshop Planned

Hawaii dams are primarily earthen embankment dams constructed approximately 50 – 100 years ago for irrigation purposes. Today, many of these older dams are abandoned since most sugar operation and production ceased. A lot of these reservoirs lack an emergency action plans. This is the key reason why the Association of Official Dam Safety Officials' (ASDSO) encourages outreach programs for dam owners.

The Department of Land and Natural Resources is planning on conducting a Dam Safety Conference geared specifically to dam owners and engineers. The conference would cover an array of topics, which will include, but not limited to:



Nuuanu Reservoir #4
Photo by Nathan Yuen

- State Dam Safety Laws
- Typical Failure Modes
- Basic Inspection Techniques
- Emergency Action Plans
- Public Safety
- Dam Owner Liability

The one-day conference is tentatively scheduled for late June 2002. If you are interested in attending, please email Mr. Edwin Matsuda at Edwin_Y_Matsuda@exec.state.hi.us to be placed on the conference mailing list. If you have any questions, please feel free to call Mr. Sterling Yong at 587-0248.



NATIONAL
FLOOD
INSURANCE
PROGRAM

Federal Emergency Management Agency

Myth vs. Fact

Who needs flood insurance? *Everyone.* And everyone in a participating community of the National Flood Insurance Program (NFIP) can buy flood insurance. Nationwide, more than 18,500 communities have joined the Program. In some instances, people have been told that they cannot buy flood insurance because of where they live. To clear up this and other misconceptions about National Flood Insurance, the NFIP has compiled a list of common myths about the Program, and the real facts behind them.

Every quarter, Hawaii Flood Management News will reveal a new "Myth vs. Fact" to give you the full story about this valuable protection. In fact, under the National Flood Insurance Act, lenders must require borrowers whose property is located within Special Flood Hazard Areas (SFHAs) to purchase flood insurance as a condition of receiving a Federally-backed mortgage loan. There is an exemption for conventional loans on properties within Coastal Barrier Resources System (CBRS) areas. Lenders should notify borrowers that their property is located in a SFHA and that Federal flood insurance is available.

Myth:

Homeowner's insurance policies cover flooding.

Fact:

Unfortunately, many homeowners do not find out until it is too late that their homeowner's policies do not cover flooding. National Flood Insurance protects your most valuable asset—your home and belongings.

Source: FEMA publication 002 (2/98) "Myth and Facts about the NFIP"

Frequently Asked Questions (FAQ)

The map shows that my lot is in the mapped floodplain, but the ground my house is on is higher. I believe I shouldn't be shown in the floodplain. What are FEMA's requirements for being removed from the 1% annual chance flood hazard area?

To be removed from the floodplain shown on the Flood Insurance Rate Map (FIRM), a structure must be on land that is not subject to flooding by the 1% annual chance flood. Remember, more severe floods can and do happen, so even if your home is found to be on high ground, it may still be damaged by an extreme flood event.

If your lot or building site is on natural ground that is higher than the base flood elevation (BFE) shown on the FIRM, then you may request a Letter of Map Amendment (LOMA). To support your request, you will have to get a surveyor to determine the elevation of the ground next to your building and complete an Elevation Certificate. If the ground is higher than the BFE, the FEMA will issue a LOMA. With a LOMA, your lender may choose to not require flood insurance.

If your home was built on fill that was placed after the FIRM was prepared, you may request a Letter of Map Revision Based on Fill (LOMA-F). As with a LOMA, you will need to get an Elevation Certificate completed by a land surveyor. If the filled ground is higher than the BFE, and if you do not have a basement, the FEMA may issue a LOMR-F, and your lender may choose to not require flood insurance.

A copy of FEMA's Elevation Certificate (Form 81-31) can be found online at: <http://www.fema.gov/library/elvcert.pdf>

Additional Help?

Call 1-877-FEMA-MAP or email a Map Specialist at bakemail@mbakercorp.com.

Source: Federal Emergency Management Agency

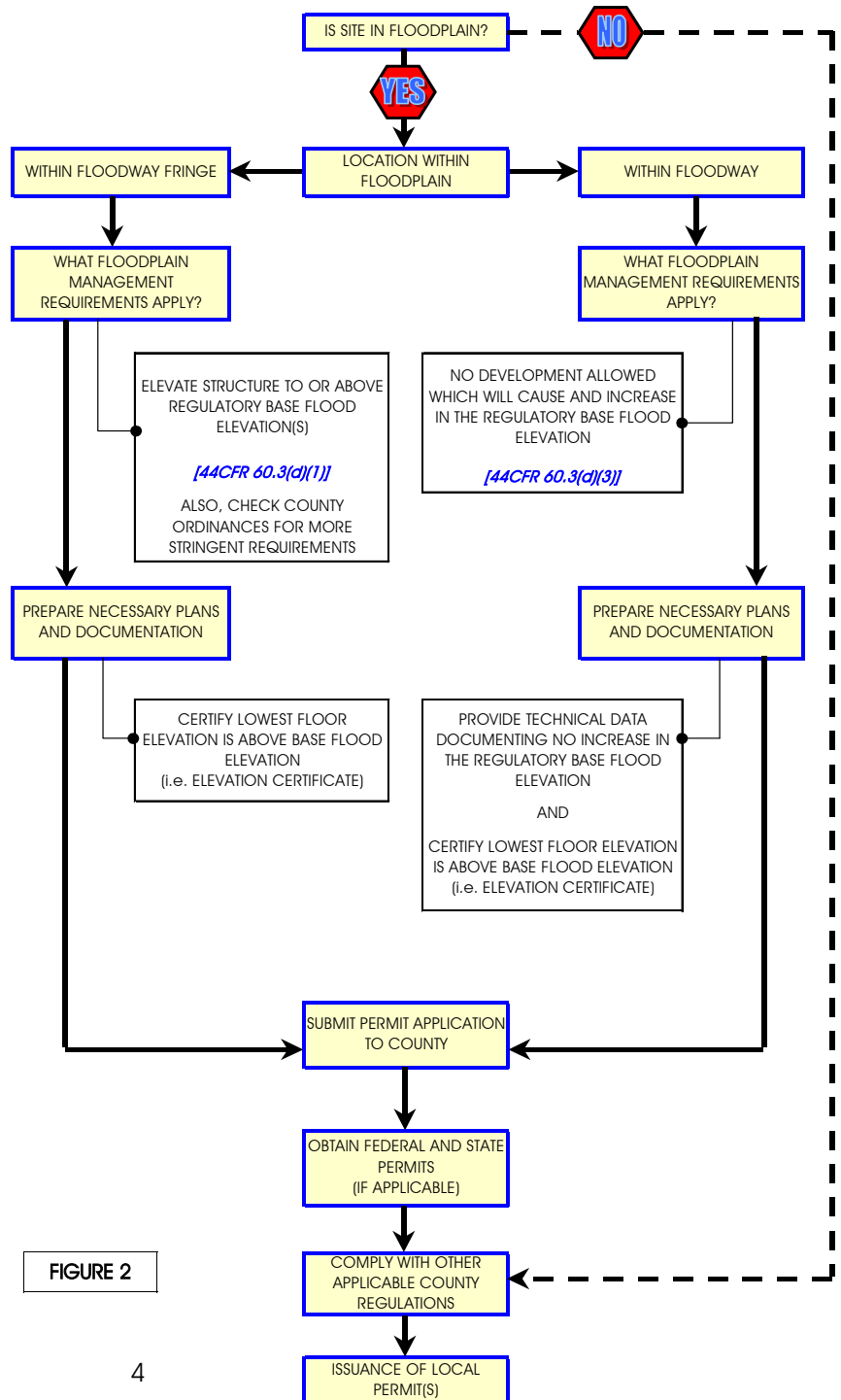
Compliance with Floodway Regulations" - continued on page 1

This requirement exceeds the minimum NFIP regulations, therefore Developers, Contractors, and Engineers should always check the applicable local County ordinances to ensure compliance. The four County's web-site addresses are provided in "Useful Links" section of this newsletter.

The following flowchart (see Figure 2) outlines the process by which a new development should proceed.



Source: "Floodplain Management Information Series: A Special Report, Procedures for Compliance with Floodway Regulations", U.S. Army Corps of Engineers, 5/90.





United States Dam Trivia

Photo: Boundary Dam in Spokane, Washington

- ◆ There are 76,926 dams listed in the National Inventory (1998-1999).
- ◆ Only 2.7% of the dams are owned by the Federal Government.
- ◆ 81% of the dams in the inventory are earthen dams.
- ◆ 1,595 significant hazard dams are within one mile of a downstream city.
- ◆ 20 dams in the inventory were completed in the 18th Century.
- ◆ The oldest dam in the inventory is Mill pond dam in Newington, CT, built in 1677.
- ◆ 3,123 dams were completed in 1960, the greatest number of dams completed in one year.
- ◆ The U.S. Army Corps of Engineers own 569 dams.
- ◆ Texas is the state with the most dams in the inventory - 6,342.
- ◆ Average age for a dam is 40 years.
- ◆ The highest dam in the U.S. is located in California and was constructed in 1968. The Oroville Dam sits impressively at 770 feet above the streambed of Feather River.



Source: National Performance of Dams Program (NPDP)

Hawaii Dam Trivia

Photo: Wahiawa Dam, Oahu



How much do you know about the dams in Hawaii? Can you correctly answer some or even all of the questions below?

- ◆ How many dams do we have in the State Inventory?
- ◆ What is the largest dam in the State Inventory?
- ◆ What is the oldest dam in Hawaii?
- ◆ How many high hazard dams do we have in Hawaii?
- ◆ What percentage of earthen dams are in the State Inventory?
- ◆ Which Island has the most number of dams?
- ◆ What percentage of dams are privately owned?

Email your answers to Carol_L_Tyau@exec.state.hi.us. The person with the most number of correct answers will receive a copy of DLNR's 2002 calendar, which features water structures in Hawaii. Look for the answers to these questions in our July 2002 issue of HFMN.

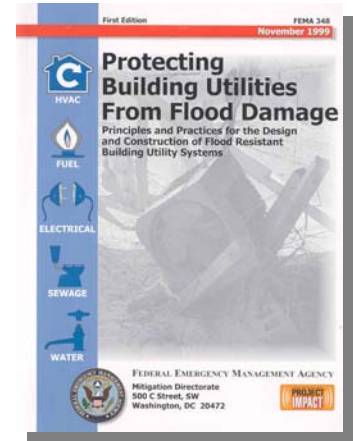


Spotlight



Spotlight, is a new section added to our newsletter. Every quarter *HFMN* will feature a FEMA publication which is available to the public free of charge.

This quarter's selection is:



Protecting Building Utilities From Flood Damage

Principle and Practices for the Design and Construction of Flood Resistant Building Utility Systems

Overview:

The intended users of this manual are developers, architects, engineers, builders, code officials, and homeowners who are involved in designing and constructing building utility systems. *Protecting Building Utilities from Flood Damage* includes sections that describe the NFIP and its floodplain management requirements, discuss floodproofing new and substantially improved buildings, and explain how to retrofit existing structures. The book also contains information about complying with model building codes.

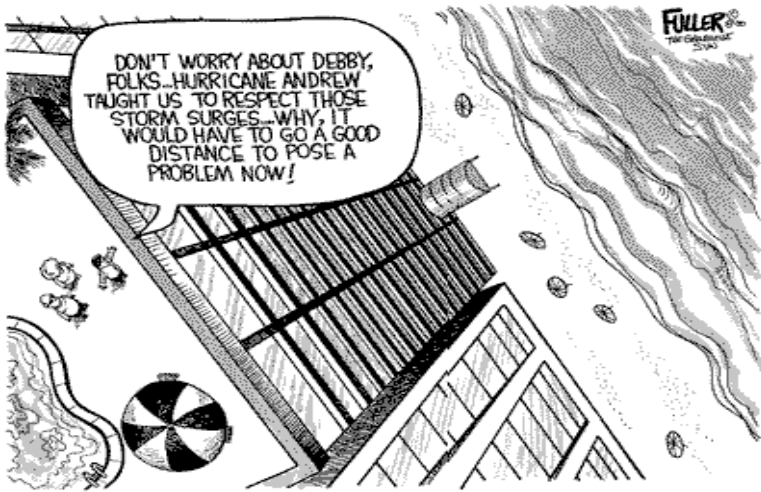
To order publications you may write to:

FEMA
P.O. Box 2012
Jessup, MD 20794-2012

Or call 1-800-480-2520 M- F, 8:00 am—5:00 pm (ET). Or you may fax your request to 301-362-5335. Unfortunately, DLNR Dam Safety / Flood Control Section does not currently have this publication in stock. However, FEMA has also made this publication available on-line at:

<http://www.fema.gov/library/pbuffd.htm>

Hawaii's Coastline



Hawaii's coastline is threatened by coastal erosion, tsunamis, hurricanes, sea level rise, flooding, subsidence, earthquakes, and lava flows. One objective of the Hawaii Coastal Zone Management Program (HCZMP) is to reduce hazard to life and property from tsunami, storm waves, stream flooding erosion, and subsidence.

There are two major approaches to dealing with erosion. The first approach involves shoreline hardening such as physical structures to control erosion. These structures include seawalls, groins, bulkheads, revetments, detached breakwaters and sand-grabbers. The other approach recognizes the dynamics of natural shoreline processes and is referred to as the "soft" approach.

Planning efforts such as zoning, shoreline setbacks and special design requirements are utilized to reduce the hazards to life and property.

Under the HCZMP, a series of special investigations have been prepared, including the reports *Oahu Shoreline Study*; *Kauai Shoreline Erosion Management Study*; *Hawaii Shoreline Erosion Management Study*; *Erosion Management Program Recommendations*.

For more information about Hawaii's Coastal Zone Management Program, see their website at: www.state.hi.us/dbedt/czm.

Source : State of Hawaii, Office of Planning, CZM



Useful Links

County Websites

Honolulu:	http://www.co.honolulu.hi.us/
Maui:	http://www.co.maui.hi.us/
Kauai:	http://www.kauaigov.org/
Hawaii:	http://www.hawaii-county.com/



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Hawaii Flood Management News

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